

DRY PASSIVATION PROCESS FOR
STAMPER/IMPRINTER FAMILY
MAKING FOR PATTERNED
RECORDING MEDIA

ABSTRACT OF THE DISCLOSURE

A method of manufacturing a stamper/imprinter for use in patterning of a recording medium comprises sequential steps of:

- (a) providing a substrate/workpiece comprising a topographically patterned surface including a plurality of projections and depressions corresponding to a pattern to be formed in a surface of the recording medium;
- 5 (b) forming a thin release layer in conformal contact with the topographically patterned surface by means of a dry process;
- (c) forming a thicker layer of a material in conformal contact with the thin passivation layer on the topographically patterned surface; and
- 10 (d) separating the thicker layer of material from the topographically patterned surface to form therefrom a stamper/imprinter including an imprinting surface having a negative image replica of the topographically patterned surface, separation of the thicker layer of material from the topographically patterned surface being facilitated by the thin release layer formed by the dry process.